ABSTRACT OF THE DISCLOSURE

[0070] Electroluminescent materials and devices which emit non-thermal light in response to an electric field are disclosed. The electroluminescent materials are based upon a multicomponent ceramic oxide host compound and one or more metal oxide dopant compounds which form a solid solution with the ceramic oxide host compound. The dopant is present in the host at an amount in the range from about 0.002 mole % to 0.1 mole %. In the electroluminescent devices, a layer of electroluminescent material is disposed between a transparent conductive oxide layer and a ground plane. An electric field generator is electrically connected to the conductive oxide layer and the ground plane for generating an electric field. The layer of electroluminescent material is coated with at least one barrier layer, and preferably a pair of barrier layers, to inhibit chemical reaction of the electroluminescent material. The electroluminescent devices preferably include a dielectric layer.